

Strontium-90 Frequently Asked Questions Draft 9.30.21

The Navy continues to be methodical in its work while conducting radiological retesting at the former Hunters Point Naval Shipyard (HPNS). The Navy follows a process established by federal law and is extremely detailed in its analysis to ensure there is no contamination that would pose a risk to public health.

Navy chemists recently found that it needed higher data quality in lab results for determining true levels of strontium-90. As a result, the Navy collaborated with regulatory agencies to determine an improved testing method.

The questions and answers that follow address what the Navy did and why.

What happened?

Navy chemists found inconsistencies in some of the strontium-90 results collected in 2021 were. For example, when labs conduct testing, they prepare “method blanks,” which are supposed to show zero contaminants when analyzed to serve as a baseline for comparison. However, some of the “blanks” were showing levels of strontium-90. This is the equivalent of having a “false positive” or “false negative” result from a medical test.

What exactly is changing?

The Navy is strengthening the laboratory method and will be using a larger sample size to provide greater certainty in the lab results.

Is there reason to be concerned about Strontium-90 at HPNS?

No. The strontium-90 lab results to date have not indicated a risk to human health or the environment. We are following standard procedures to address a lab issue. Results were not reproducible in duplicate samples and laboratory-prepared method blanks had detections – which should not contain strontium-90. Navy chemists identified the need for a new laboratory method to provide greater certainty in the lab results. The Navy has received regulatory approval for this laboratory method and will continue to follow standard procedures to ensure accurate testing.

Is this change allowed?

Yes. Both the Navy work plan for the Parcel G retesting work and the U.S. Environmental Protection Agency’s laboratory method for strontium-90 allows for adjustments like this to ensure accuracy. Navy chemists worked with the laboratory and regulatory agencies to improve the testing method for strontium-90 to provide better data quality in the lab results.

Do the regulatory agencies support changing the method for strontium?

Yes. The Navy has received regulatory approval for the new laboratory method for strontium-90 analysis in soil.

What’s next?

The Navy will reanalyze all of the Parcel G strontium-90 soil samples collected to date. The Navy will continue to provide the community updates on the Parcel G retesting work through our website, community meetings, and quarterly reports.

Commented [FWDCNHBP1]: We should use consistent language to communicate the concepts related to false-positive, higher data quality. The public generally understands false-positive so we should use the term unless it is inaccurate or is politically untenable.

Since the method blanks should have been w/o strontium contamination to mark background then it seems better to say we are ensuring data accuracy, hence the samples in question was inaccurate due to a mistake at the lab, correct?

Commented [FWDCNHBP2]: The question that the public will have is how did this occur? Is the Navy or lab at fault? Is it common for this occur when testing samples at the lab?

Commented [FWDCNHBP3]: How was the method weak, or what made it inaccurate? Using the verb strengthening is not enough. We need a little more substance to explain how the method will be modified to ensure accuracy?

Commented [FWDCNHBP4]: This points the finger at the lab. Again, we need to explain how the initial lab method failed and how the new method will actually result in accurate results.

Commented [FWDCNHBP5]: This is a positive but why didn’t the lab catch this mistake? Casts doubt on the lab’s ability to measure samples correctly.

Commented [FWDCNHBP6]: Is this a common occurrence for a lab method to fail?